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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

DAVID L. LARKIN ET AL.

Serial No. 09/988,651 (TI-23422.1)

Filed November 20, 2001

For: A METHOD FOR DECREASING CHC DEGRADATION

Art Unit 2891

Examiner Igwe U. Anya

Customer No. 23494

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1-15-08

Jay M. Cantor, Reg. No. 19,906

Sir:

REPLY BRIEF

In reply to the Examiner's Answer, it is initially again requested that a chemical Board consider this appeal since the invention herein is directed to matters of chemistry only and not to electronics.

It is noted that this is the fourth brief on appeal filed in this application. The application was initially allowed after filing of a brief on appeal. An RCE was then filed with three subsequent briefs on appeal having been filed. This application has an effective filing date of August 13, 1998 based upon the filing of the original provisional application and the parent application is now Patent No. 6,350,673.

The examiner, contrary to the record, states in STATUS OF CLAIMS that statements in the Brief on Appeal are partially correct, stating that the allowability of claims 15-19 and 24 to 28 had been rescinded, apparently implying that appellants were attempting to hide this fact from the Board by some sinister means. A review of the Brief on Appeal will show that the rescission of the allowance of these claims is clearly set forth in STATUS OF CLAIMS.

The issue in this appeal is very simple and relies on a knowledge of elementary chemistry. As stated in the specification, the basic feature of the invention lies in complete saturation of the semiconductor device with hydrogen. However, as is well known to any person versed in chemistry and specifically in the chemistry of semiconductor devices, the number of locations in the semiconductor matrix wherein hydrogen atoms can be affixed is huge and is generally numbered in millions if not billions or more. There is therefore the possibility that one or a few such locations in the device will not receive a hydrogen atom without any effect on the desired result. This is exactly the reason for use of the term "substantially".

The case law, which the examiner appears to either ignore or attempt to overrule, is quite clear. As stated in the Brief on Appeal and repeated herein, it is well known and the Courts have consistently held that the term "substantially" or "substantial" can be used as long as any deviation is inconsequential. In the present case, saturation may not be 100%, however a saturation which very closely approaches 100% and provides the results as claimed is still covered by the invention and that is what is being claimed. In the present case, since there are millions if not billions or more of bond sites available for saturation, it is possible and likely that an insignificant number of such sites may not become saturated. This is in no way an alteration of the invention as claimed. The Court stated "The word substantial, however, requires only that the crystalline content not be

inconsequential" citing *Standard Oil et al. v. Montedison et al. S.p.A.*, 206 U.S.P.Q. 676 at 714. It follows that there is no new matter in the claims as presented.

Also, as stated in the Brief on Appeal, reference is made to M.P.E.P. 2173(b) D wherein the term "substantially" is stated by Court decision not to be indefinite. Furthermore, it is not indefinite in the sense used in the present claims. The above-noted M.P.E.P. section states "The term 'substantially' is often used in conjunction with another term to describe a particular characteristic of the claimed invention. It is a broad term. *In re Nehrenberg*, 280 F2d 161, 126 USPQ 383 (CCPA 1960). The court held that the limitation 'to substantially increase the efficiency of the compound as a copper extractant' was definite in view of the general guidelines contained in the specification. *In re Mattison*, 509 F2d 563, 184 USPQ 484 (CCPA 1975). The court held that the limitation 'which produces substantially equal E and H plane illumination patterns' was definite because one of ordinary skill in the art would know what was meant by 'substantially equal.' *Andrew Corp. v. Gabriel Electronics*, 847 F2d 819, 6 USPQ 2d 2010 (Fed. Cir. 1988)." The intent of the present invention is to totally saturate the semiconductor device with hydrogen. However, it is possible and probably likely that a very small and insignificant number of sites may be unsaturated without in any way altering the invention herein. Such devices are also covered by the invention herein and the term "substantially" is used to cover such devices. It is therefore readily apparent that not only does simple logic dictate that the claims are definite, but, in addition, the case law, the MPEP, common sense and file wrapper estoppel also dictate the scope of the claims herein. This case falls on all fours with the decision in *Andrew Corp. v. Gabriel Electronics* as noted above and cited in the MPEP.

Otherwise, appellants rely upon the arguments presented in the Brief on Appeal.

For the reasons stated above and in the Brief on Appeal, reversal of the final rejection and allowance of the claims on appeal is requested that justice be done in the premises.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jay M. Cantor', with a stylized flourish at the end.

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